



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John Patrick Lemmon et al )

Serial No.: 10/747,838 )

Filing Date: 12/29/2003 )

For: Compositions and Methods For Hydrogen )  
Storage and Recovery )

Group Art Unit:

Examiner:

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§ 1.56, 1.97 AND 1.98

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose, submitted herewith is form PTO-A820 (PTO-1449) listing publication(s) of which those designated by 37 CFR § 1.56 are aware. Copies of the non-United States patents or published applications are enclosed.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or an admission that the information cited is, or is considered to be, material to patentability.

Respectfully submitted,

CANTOR COLBURN LLP

By: \_\_\_\_\_

  
David E. Rodrigues  
Registration No. 50,604

Date: April 16, 2004

Customer No. 23,413

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**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
**(Under 37 CFR 1.97(b) or 1.97(c))**

Docket No.  
**133456-1**

In Re Application Of: **John Patrick Lemmon et al**

APR 19 2004

Serial No.

Filing Date

Examiner

Group Art Unit

10/2003, 838

12/29/2003

Title:

**Compositions and Methods For Hydrogen Storage and Recovery**

Address to:

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

**OR**

☐ the fee set forth in 37 CFR 1.17(p).

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
133456-1

In Re Application: John Patrick Lemmon et al

APR 19 2004

Serial No.

Filing Date

Examiner

Group Art Unit

1077838

12/29/2003

Compositions and Methods For Hydrogen Storage and Recovery

**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

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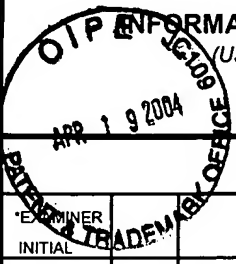
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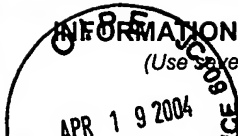
Dated: April 16, 2004

David E. Rodrigues  
Registration No. 50,604  
Customer No. 23, 413  
Tel: (860) 286-2929

CC:

 <p><b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)</p>				ATTY DOCKET NO. <b>133456-1</b>		SERIAL NO. <b>10/747,838</b>	
				Applicant(s): <b>John Patrick Lemmon et al</b>			
				FILING <b>12/29/2003</b>		GROUP	
<b>U.S. PATENT DOCUMENTS</b>							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,820,226	04/11/1989	Hsu			
		5,389,333	02/14/1995	Li et al			
		5,882,623	03/16/1999	Zaluska et al			
		6,024,935	02/15/2000	Mills et al			
		6,080,381	06/27/2000	Zaluska et al			
		6,137,550	10/24/2000	Hinchliffe et al			
		6,329,076	12/11/2001	Kawabe et al			
		6,447,942	09/10/2002	Ovshinsky et al			
		6,579,833	06/17/2003	McNallan et al			
		6,602,485	08/05/2003	Tsuboi			
		US20020100725	08/01/2002	Lee et al			
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
		EP 1 116 797 A1	07/18/2001	European Patent Office			
		WO 95/25355	09/21/1995	WIPO			
		WO 97/43206	11/20/1997	WIPO			
		WO 98/10329	03/12/1998	WIPO			
		WO 98/15986	04/16/1998	WIPO			
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Ji-Cheng Zhao, "A Combinatorial Approach for Structural Materials", <i>Advanced Engineering Materials</i> 2001, 3, No. 3, pp. 143-147					
		Ji-Cheng Zhao, "A combinatorial approach for efficient mapping of phase diagrams and properties", <i>J. Mater. Res.</i> , Vol 16, No. 6, June 2001, pp. 1565-1578					
<b>EXAMINER</b>				<b>DATE CONSIDERED</b>			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<div style="text-align: center;">  <p><b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)</p> </div>	ATTY DOCKET NO. <b>133456-1</b>	SERIAL NO. <b>10/747,838</b>
	Applicant(s): <b>John Patrick Lemmon et al</b>	
	FILING <b>12/29/2003</b>	GROUP

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

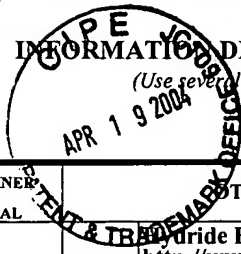
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 01/30520 A1	05/03/2001	WIPO				
	WO 01/51410 A1	07/19/2001	WIPO				
	WO 02/087291 A2	10/31/2002	WIPO				

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

		Kentaro Ito and Tetsuya Kubo, "Gas Detection by Hydrochromism", Proceedings of the 4th Sensor Symposium, 1984, pp. 153-156.
		K. Ito and T. Ohgami, "Hydrogen detection based on coloration of anodic tungsten oxide film", <i>Appl. Phys. Lett.</i> 60 (8), 24 February 1992, pp. 938-940.

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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<div style="text-align: center;">  <p><b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)</p> </div>		Docket Number (Optional) <b>133456-1</b>	Application Number <b>10/747,838</b>
		Applicant(s) <b>John Patrick Lemmon et al</b>	
		Filing Date <b>12/29/2003</b>	Group Art Unit
*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
	Hydride Basics, "Solid-H(TM) Metal Hydrides", U.S. Patent No. 4,600,525, <a href="http://www.hydrogencomponents.com/hydride.html">http://www.hydrogencomponents.com/hydride.html</a> , 9/6/2003, pp. 1-3.		
	K. Christmann, "Interaction of Hydrogen With Solid Surfaces", <i>Surface Science Reports</i> 9 (1988) 1-163, North-Holland, Amsterdam, Manuscript received in final form 13 April 1988, pp. 1-163		
	D. J. Taylor et al, "Microstructure of Laser-Fired, Sol-Gel-Derived Tungsten Oxide Films", <i>Chem. Mater.</i> 1996, 8, pp. 1396-1401.		
	Sung Hyeon Baek et al, "Photoelectrochemical Hydrogen Production Using New Combinatorial Chemistry Derived Materials", Proceedings of the 2002 DOE Hydrogen Program Review, NREL/CP-610-32405, DOE Project # DE-FC36-01GO11092, PI: Eric W. McFarland, pp. 1-10		
	Jussi Eloranta et al, "Photogeneration of atomic hydrogen in rare gas matrices", accepted 25 January 1999, <i>Journal of Chemical Physics</i> , Volume 110, Number 16, pp. 7917-7925.		
	Darlene K. Slattery and Michael D. Hampton, "Complex Hydrides for Hydrogen Storage", Proceedings of the 2002 DOE Hydrogen Program Review, NREL/CP-610-32405, pp. 1-9		
	Thomas F. Jaramillo et al, "Articles, High-Throughput Screening System for Catalytic Hydrogen-Producing Materials", <i>J. Comb. Chem.</i> 2002, 4, 17-22.		
	John J. Petrovic, Advanced Concepts for Hydrogen Storage, DOE Hydrogen Storage Workshop, Argonne National Laboratory, 14-15 August 2002		
	Wim Soppe et al, Institute of Microtechnology (IMT), Microwave Plasma Assisted VHF-PECVD of Micro-Crystalline Silicon		
	A.F. Djakov, V.D. Rusanov, RAO "EES Russia", Russia, Hydrogen In Energy In Long-Term Prospect, World Energy Council, <a href="http://www.worldenergy.org/wec-geis/publications/default/tech_papers/17th_congress/3_3_09.asp">http://www.worldenergy.org/wec-geis/publications/default/tech_papers/17th_congress/3_3_09.asp</a> , 9/12/2003, pp. 1-6.		
	Hydrogen Review Article, Hydrogen Review, <a href="http://naftp.nrcce.wvu.edu/techinfo/altfuels/H2/Hydrogen.html">http://naftp.nrcce.wvu.edu/techinfo/altfuels/H2/Hydrogen.html</a> , 9/11/2003, pp. 1-10.		
	Thomas Klassen et al, Nanocrystalline Mg-based Hydrides: Hydrogen Storage for the Zero-Emission Vehicle		
EXAMINER	DATE CONSIDERED		
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>			

